

STIC Biotechnology Systems Branch

RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 10/590,464
Source: IFwP
Date Processed by STIC: 9/1/06

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

PLEASE FORWARD THIS INFORMATION TO THE APPLICANT BY EITHER:

- 1) **INCLUDING A COPY OF THIS PRINTOUT IN YOUR NEXT COMMUNICATION TO THE APPLICANT, WITH A NOTICE TO COMPLY or,**
- 2) **TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY**

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.4.0 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

Applicants submitting genetic sequence information electronically on diskette or CD-Rom should be aware that there is a possibility that the disk/CD-Rom may have been affected by treatment given to all incoming mail.

Please consider using alternate methods of submission for the disk/CD-Rom or replacement disk/CD-Rom.

Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. **EFS-Bio (<http://www.uspto.gov/ebc/efs/downloads/documents.htm>) , EFS Submission User Manual - ePAVE)**
2. **U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450**
3. **Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 01/14/05):
U.S. Patent and Trademark Office, Mail Stop Sequence, Customer Window, Randolph Building, 401 Dulany Street, Alexandria, VA 22314**

Revised 01/10/06

Raw Sequence Listing Error Summary

ERROR DETECTED

SUGGESTED CORRECTION

SERIAL NUMBER: 10/590,464

ATTN: NEW RULES CASES: PLEASE DISREGARD ENGLISH "ALPHA" HEADERS, WHICH WERE INSERTED BY PTO SOFTWARE

- 1 Wrapped Nucleics The number/text at the end of each line "wrapped" down to the next line. This may occur if your file was retrieved in a word processor after creating it. Please adjust your right margin to .3; this will prevent "wrapping."
- 2 Invalid Line Length The rules require that a line **not exceed** 72 characters in length. This includes white spaces.
- 3 Misaligned Amino Numbering The numbering under each 5th amino acid is misaligned. Do **not** use tab codes between numbers; use **space characters**, instead.
- 4 Non-ASCII The submitted file was **not** saved in ASCII(DOS) text, as required by the Sequence Rules. **Please ensure your subsequent submission is saved in ASCII text.**
- 5 Variable Length Sequence(s) _____ contain n's or Xaa's representing more than one residue. **Per Sequence Rules, each n or Xaa can only represent a single residue.** Please present the **maximum** number of each residue having variable length and indicate in the <220>-<223> section that some may be missing.
- 6 PatentIn 2.0 "bug" A "bug" in PatentIn version 2.0 has caused the <220>-<223> section to be missing from amino acid sequences(s) _____. Normally, PatentIn would automatically generate this section from the previously coded nucleic acid sequence. Please manually copy the relevant <220>-<223> section to the subsequent amino acid sequence. **This applies to the mandatory <220>-<223> sections for Artificial or Unknown sequences.**
- 7 Skipped Sequences (OLD RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence:
 (2) INFORMATION FOR SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 (i) SEQUENCE CHARACTERISTICS: (Do not insert any subheadings under this heading)
 (xi) SEQUENCE DESCRIPTION:SEQ ID NO:X: (insert SEQ ID NO where "X" is shown)
 This sequence is intentionally skipped
 Please also adjust the "(ii) NUMBER OF SEQUENCES." response to **include** the skipped sequences.
- 8 Skipped Sequences (NEW RULES) Sequence(s) _____ missing. If intentional, please insert the following lines for **each** skipped sequence.
 <210> sequence id number
 <400> sequence id number
 000
- 9 Use of n's or Xaa's (NEW RULES) Use of n's and/or Xaa's have been detected in the Sequence Listing.
 Per 1.823 of Sequence Rules, use of <220>-<223> is **MANDATORY** if n's or Xaa's are present.
 In <220> to <223> section, please explain location of n or Xaa, and which residue n or Xaa represents.
- 10 Invalid <213> Response Per 1.823 of Sequence Rules, the **only valid** <213> responses are: Unknown, Artificial Sequence, or scientific name (Genus/species). <220>-<223> section is **required** when <213> response is Unknown or is Artificial Sequence. (see item 11 below)
- 11 Use of <220> Sequence(s) _____ missing the <220> "Feature" and associated numeric identifiers and responses. Use of <220> to <223> is **MANDATORY** if <213> "Organism" response is "Artificial Sequence" or "Unknown." Please explain source of genetic material in <220> to <223> section or use "chemically synthesized" as explanation. (See "Federal Register," 06/01/1998, Vol. 63, No. 104, pp. 29631-32), also Sec. 1.823 of Sequence Rules
- 12 PatentIn 2.0 "bug" Please do not use "Copy to Disk" function of PatentIn version 2.0. This causes a corrupted file, resulting in missing mandatory numeric identifiers and responses (as indicated on raw sequence listing). Instead, please use "File Manager" or any other manual means to copy file to floppy disk.
- 13 Misuse of n/Xaa "n" can **only** represent a single nucleotide; "Xaa" can **only** represent a single amino acid



IFWP

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006
TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

3 <110> APPLICANT: Kihara Memorial Yokohama Foundation for the Advancement of Life Sciences

4 City of Yokohama

6 <120> TITLE OF INVENTION: TRF2 DNA-binding domain mutant proteins, telomeric DNA mutants, and use

7 of a structure of a complex between a TRF2 DNA binding domain and a double-stranded DNA molecule

10 <130> FILE REFERENCE: FP-047PCT

C--> 12 <140> CURRENT APPLICATION NUMBER: US/10/590,464

C--> 13 <141> CURRENT FILING DATE: 2006-08-23

15 <150> PRIOR APPLICATION NUMBER: JP P2004-046238

16 <151> PRIOR FILING DATE: 2004-02-23

18 <160> NUMBER OF SEQ ID NOS: 29

20 <170> SOFTWARE: PatentIn version 3.1

22 <210> SEQ ID NO: 1

23 <211> LENGTH: 189

24 <212> TYPE: DNA

25 <213> ORGANISM: Homo sapiens

27 <220> FEATURE:

28 <221> NAME/KEY: CDS

29 <222> LOCATION: (1)..(189)

30 <223> OTHER INFORMATION:

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33 gaa gac agt aca acc aat ata aca aaa aag cag aag tgg act gta gaa 48
34 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu

35 1 5 10 15

37 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac 96
38 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn

39 20 25 30

41 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg 144
42 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val

43 35 40 45

45 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac 189
46 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn

47 : 50 55 60

50 <210> SEQ ID NO: 2

51 <211> LENGTH: 63

52 <212> TYPE: PRT

53 <213> ORGANISM: Homo sapiens

55 <400> SEQUENCE: 2

57 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu 58 1 5 10 15

61 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn 62 20 25 30

*Does Not Comply
Corrected Diskette Needed
see pp 3-6*

65 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006
TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

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69 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
70      50          55          60
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74 <211> LENGTH: 189
75 <212> TYPE: DNA
76 <213> ORGANISM: Artificial
78 <220> FEATURE:
79 <223> OTHER INFORMATION: synthetic DNA
81 <220> FEATURE:
82 <221> NAME/KEY: CDS
83 <222> LOCATION: (1)..(189)
84 <223> OTHER INFORMATION:
W--> 86 <400> 3
87 gaa gac agt aca acc aat ata aca aaa agg cag aag tgg act gta gaa      48
88 Glu Asp Ser Thr Thr Asn Ile Thr Lys Arg Gln Lys Trp Thr Val Glu
89 1           5           10          15
91 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac      96
92 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
93           20          25          30
95 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg      144
96 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
97           35          40          45
99 atg att aag gat cgc tgg cgg acc atg aaa aga ctt ggc atg aac      189
100 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
101      50          55          60
104 <210> SEQ ID NO: 4
105 <211> LENGTH: 63
106 <212> TYPE: PRT
107 <213> ORGANISM: Artificial
109 <220> FEATURE:
110 <223> OTHER INFORMATION: synthetic DNA
112 <400> SEQUENCE: 4
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115 1           5           10          15
118 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
119           20          25          30
122 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
123           35          40          45
126 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
127           50          55          60
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131 <211> LENGTH: 189
132 <212> TYPE: DNA
133 <213> ORGANISM: Artificial
135 <220> FEATURE:
136 <223> OTHER INFORMATION: synthetic DNA
138 <220> FEATURE:
139 <221> NAME/KEY: CDS

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this is not a DNA sequence

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006
TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

140 <222> LOCATION: (1)..(189)
 141 <223> OTHER INFORMATION:
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 144 gaa gac agt aca acc aat ata aca aaa aag cag aag tgg act gta gaa 48
 145 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
 146 1 5 10 15
 148 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac 96
 149 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 150 20 25 30
 152 tgg tct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg 144
 153 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
 154 35 40 45
 156 atg att aag gat cgc tgg cg acc atg aaa aga ctt ggc atg aac 189
 157 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
 158 50 55 60
 161 <210> SEQ ID NO: 6
 162 <211> LENGTH: 63
 163 <212> TYPE: PRT
 164 <213> ORGANISM: Artificial
 166 <220> FEATURE:
 167 <223> OTHER INFORMATION: synthetic DNA *not a DNA sequence*
 169 <400> SEQUENCE: 6
 171 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
 172 1 5 10 15
 175 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 176 20 25 30
 179 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
 180 35 40 45
 183 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
 184 50 55 60
 187 <210> SEQ ID NO: 7
 188 <211> LENGTH: 189
 189 <212> TYPE: DNA
 190 <213> ORGANISM: Artificial
 192 <220> FEATURE:
 193 <223> OTHER INFORMATION: synthetic DNA
 195 <220> FEATURE:
 196 <221> NAME/KEY: CDS
 197 <222> LOCATION: (1)..(189)
 198 <223> OTHER INFORMATION:
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 202 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
 203 1 5 10 15
 205 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac 96
 206 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 207 20 25 30
 209 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca tct gtg 144
 210 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val

RAW SEQUENCE LISTING DATE: 09/01/2006
 PATENT APPLICATION: US/10/590,464 TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
 Output Set: N:\CRF4\09012006\J590464.raw

211 35 40 45
 213 atg att aag gat cgc tgg cg acc atg aaa aga ctt ggc atg aac 189
 214 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
 215 50 55 60
 218 <210> SEQ ID NO: 8
 219 <211> LENGTH: 63
 220 <212> TYPE: PRT
 221 <213> ORGANISM: Artificial
 223 <220> FEATURE:
 224 <223> OTHER INFORMATION: synthetic DNA *same error*
 226 <400> SEQUENCE: 8
 228 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
 229 1 5 10 15
 232 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 233 20 25 30
 236 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val
 237 35 40 45
 240 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Arg Leu Gly Met Asn
 241 50 55 60
 244 <210> SEQ ID NO: 9
 245 <211> LENGTH: 189
 246 <212> TYPE: DNA
 247 <213> ORGANISM: Artificial
 249 <220> FEATURE:
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 252 <220> FEATURE:
 253 <221> NAME/KEY: CDS
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 255 <223> OTHER INFORMATION:
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 259 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
 260 1 5 10 15
 262 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac 96
 263 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
 264 20 25 30
 266 tgg gct gcc att tct aaa aat tac cca ttt gtt aac cga aca gct gtg 144
 267 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
 268 35 40 45
 270 atg att aag gat cgc tgg cg acc atg aaa aag ctt ggc atg aac
 271 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn 189
 272 50 55 60
 275 <210> SEQ ID NO: 10
 276 <211> LENGTH: 63
 277 <212> TYPE: PRT
 278 <213> ORGANISM: Artificial
 280 <220> FEATURE:
 281 <223> OTHER INFORMATION: synthetic DNA *same error*
 283 <400> SEQUENCE: 10

RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006
TIME: 11:33:27

Input Set : A:\PTO.RJ.txt
Output Set: N:\CRF4\09012006\J590464.raw

285 Glu Asp Ser Thr Thr Asn Ile Thr Lys Lys Gln Lys Trp Thr Val Glu
286 1 5 10 15
289 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn
290 20 25 30
293 Trp Ala Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ala Val
294 35 40 45
297 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn
298 50 55 60

301 <210> SEQ ID NO: 11

302 <211> LENGTH: 189

303 <212> TYPE: DNA

304 <213> ORGANISM: Artificial

306 <220> FEATURE:

307 <223> OTHER INFORMATION: synthetic DNA

309 <220> FEATURE:

310 <221> NAME/KEY: CDS

311 <222> LOCATION: (1)..(189)

312 <223> OTHER INFORMATION:

W--> 314 <400> 11

315 gaa gac agt aca acc aat ata aca aaa agg cag aag tgg act gta gaa	48
316 Glu Asp Ser Thr Thr Asn Ile Thr Lys Arg Gln Lys Trp Thr Val Glu	
317 1 5 10 15	
319 gaa agc gag tgg gtc aag gct gga gtg cag aaa tat ggg gaa gga aac	96
320 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn	
321 20 25 30	
323 tgg tct gcc att tct aaa aat tac cca ttt gtt aac cga aca tct gtg	144
324 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val	
325 35 40 45	
327 atg att aag gat cgc tgg cg acc atg aaa aag ctt ggc atg aac	189
328 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn	
329 50 55 60	

332 <210> SEQ ID NO: 12

333 <211> LENGTH: 63

334 <212> TYPE: PRT

335 <213> ORGANISM: Artificial

337 <220> FEATURE:

338 <223> OTHER INFORMATION: synthetic DNA

340 <400> SEQUENCE: 12

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346 Glu Ser Glu Trp Val Lys Ala Gly Val Gln Lys Tyr Gly Glu Gly Asn	
347 20 25 30	
350 Trp Ser Ala Ile Ser Lys Asn Tyr Pro Phe Val Asn Arg Thr Ser Val	
351 35 40 45	
354 Met Ile Lys Asp Arg Trp Arg Thr Met Lys Lys Leu Gly Met Asn	
355 50 55 60	

358 <210> SEQ ID NO: 13

359 <211> LENGTH: 189

360 <212> TYPE: DNA

same error in sequence 14

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/590,464

DATE: 09/01/2006

TIME: 11:33:28

Input Set : A:\PTO.RJ.txt

Output Set: N:\CRF4\09012006\J590464.raw

L:12 M:270 C: Current Application Number differs, Replaced Application Number
L:13 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:32 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:1,Line#:30
L:86 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:3,Line#:84
L:143 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:5,Line#:141
L:200 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:7,Line#:198
L:257 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:9,Line#:255
L:314 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:11,Line#:312
L:371 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:13,Line#:369
L:425 M:258 W: Mandatory Feature missing, <223> Blank for SEQ#:15,Line#:423